AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of the claims in this application:

Claim 1. (Currently Amended) A radio communication system in which radio communication is performed between a base station and a mobile station, the base station comprising:

first transmitting means for transmitting a first transmitted radio signal to the mobile station;

first receiving means for receiving a first received radio signal from the mobile station; and

first control means for controlling the first transmitting means and the first receiving means to achieve high-speed communication between the base station and the mobile station, when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, by using at least two basic-frequency channels, ~~when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, the~~ each basic-frequency channel having a multi-carrier OFDM signal; and

the mobile station comprising:

second transmitting means for transmitting a second transmitted radio signal to the base station;

second receiving means for receiving a second received radio signal from the base station; and

second control means for controlling the second transmitting means and the second receiving means to achieve high-speed

communication between the base station and the mobile station by using at least two basic-frequency channels, when the mobile station exists in the specific area~~.~~,

wherein the specific area is an area with a predetermined transmitting power, a predetermined radius between the circumference of the specific area and the border between two adjacent cells, and a predetermined radius for each cell.

Claim 2. (Currently Amended) The radio communication system according to claim 1, wherein the base station and/or the mobile station determine whether the mobile station exists in the specific area~~, from~~ based on the first received radio signal or the second received radio signal.

Claim 3. (Previously Presented) The radio communication system according to claim 1, wherein the high-speed communication is achieved through one OFDM frequency channel composed of the basic-frequency channels and sub-carrier channels provided among the basic-frequency channels.

Claim 4. (Currently Amended) A base station for use in a radio communication system in which radio communication is performed between the base station and a mobile station, the base station comprising:

transmitting means for transmitting a transmitted radio signal to the mobile station;

receiving means for receiving a received radio signal from

the mobile station; and

control means for controlling the transmitting means and the receiving means to achieve high-speed communication between the base station and the mobile station, when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, by using at least two basic-frequency channels, ~~when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, the~~ each basic-frequency channel having a multi-carrier OFDM signal~~.~~,

wherein the specific area is an area with a predetermined transmitting power, a predetermined radius between the circumference of the specific area and the border between two adjacent cells, and a predetermined radius for each cell.

Claim 5. (Currently Amended) The base station according to claim 4, wherein the control means determines whether the mobile station exists in the specific area~~, from~~ based on the received radio signal the receiving means has received from the mobile station.

Claim 6. (Original) The base station according to claim 4, wherein the high-speed communication is achieved through the OFDM frequency channel composed of the basic-frequency channels and sub-carrier channels provided among the basic-frequency channels.

Claim 7. (Currently Amended) A mobile station for use in a

radio communication system in which radio communication is performed between a base station and the mobile station, the mobile station comprising:

transmitting means for transmitting a transmitted radio signal to the base station;

receiving means for receiving a received radio signal from the base station; and

control means for controlling the transmitting means and the receiving means to achieve high-speed communication between the base station and the mobile station, when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, by using at least two basic-frequency channels, ~~when the mobile station exists in a specific area within a cell to which a basic-frequency channel is assigned, the~~ each basic-frequency channel having a multi-carrier OFDM signal~~.~~,

wherein the specific area is an area with a predetermined transmitting power, a predetermined radius between the circumference of the specific area and the border between two adjacent cells, and a predetermined radius for each cell.

Claim 8. (Currently Amended) The mobile station according to claim 7, wherein the control means determines whether the mobile station exists in the specific area~~, from~~ based on the received signal the receiving means has received from the base station.

Claim 9. (Original) The mobile station according to claim 7,

wherein the high-speed communication is achieved through on OFDM frequency channel composed of the basic-frequency channels and sub-carrier channels provided among the basic-frequency channels.

Claim 10. (Currently Amended) A radio communication system in which radio communication is performed between a base station and a mobile station, the radio communication system comprising:

a plurality of first-type cells to which each of a plurality of basic-frequency channels is assigned respectively, each channel comprising a multi-carrier OFDM signal; and

a plurality of second-type cells, each of which is provided in one first-type cell of the plurality of first-type cells, to which the basic-frequency channels are assigned to achieve high-speed communication between the base station and the mobile station~~.~~

wherein the specific area is an area with a predetermined transmitting power, a predetermined radius between the circumference of the specific area and the border between two adjacent cells, and a predetermined radius for each cell.

Claim 11 (Original) The radio communication system according to claim 10, wherein the high-speed communication is achieved through one OFDM frequency channel composed of the basic-frequency channels and sub-carrier channels provided among the basic-frequency channels.

Claim 12. (Currently Amended) A method of performing radio

communication between a base station and a mobile station, the method comprising the steps of:

performing radio communication between the base station and the mobile station through a basic-frequency channel assigned to a cell, the basic-frequency channel comprising a multi-carrier OFDM signal; and

performing high-speed communication between the base station and the mobile station, through the basic-frequency channels when the mobile station exists in a specific area within the cell~~,~~

wherein the specific area is an area with a predetermined transmitting power, a predetermined radius between the circumference of the specific area and the border between two adjacent cells, and a predetermined radius for each cell.

Claim 13. (Currently Amended) The method according to claim 12, further comprising the step of

determining whether the mobile station exists in the specific area~~, from~~ based on the signals received by either the base station and the mobile station.

Claim 14. (Original) The method according to claim 12, wherein the high-speed communication is achieved through one OFDM frequency channel composed of the basic-frequency channels and sub-carrier channels provided among the basic frequency channels.